REMARKS

In this Response, claims 1, 8-14 and 17 are amended and claim 18 is added. No new matter is added by the amendments. Accordingly, claims 1-18 are pending in the present application. Applicants respectfully request reconsideration of the application in view of the above amendments and remarks made herein.

I.   Rejections Under 35 U.S.C. § 102

Claims 1-17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0046572 attributed to *Newman et al.* (hereinafter "*Newman*"), for the reasons set forth on pages 2-6 of the Office Action.

With respect to claims 1 and 8, Applicants respectfully submit that *Newman* does not anticipate these claims because *Newman* does not disclose "providing a database engine having encryption as a database kernel feature", "internally encrypting said working encryption key within said database engine using a public key from an authorized user" and "internally encrypting said data within said database engine using said working key".

In the Office Action, with regard to claims 1 and 8, the Examiner states: "Newman et al. discloses a method and program storage of *internally* encrypting data in a relational database...." (emphasis added). Applicants respectfully disagree with the Examiner and submit that the *Newman* approach is an example of loose coupling encryption—i.e., data are first encrypted *outside* the database engine and then loaded into the database—and, in this context, the term "internally" is meaningless and misleading. Moreover, Applicants respectfully note that the *Newman* reference, itself, does not use the terms "internally" or "internal".

Newman (paragraph 21) discloses: "the invention comprises two major components. First, the invention comprises a low-level API, which functions as a shell, providing cryptographic algorithms for Procedural Language/Structured Query Language (PL/SQL) developers. Second, the invention comprises a key management system which utilizes the low-level API to provide a turnkey solution to automatically and

transparently encrypt data in columns and rows." Therefore, *Newman* provides *encryption service to end users via add-on APIs.* It is not a database kernel feature.

Newman (paragraph 4) discloses: "The invention provides transparent encryption functionality that allows the user ... to encrypt data within a database without implementing details. As a low level interface, the invention allows a PL/SQL programmer to use encryption as he or she sees fit. ... This low level interface is similar in concept to the DBMS_OBFUSCATION_TOOLKIT." Therefore, *Newman's* method is based on Oracle's existing DBMS_OBFUSCATION_TOOLKIT, which is a typical example of loose coupling encryption. No SQL statement modification or extension is mentioned in the *Newman* reference. SQL statement is the basic and only language that a database engine understands. Anything else is applications of the SQL statements. For example, the views and triggers mentioned in *Newman* are database kernel features, and they can be used by *Newman's* method to implement loose coupling database encryption, like the DBMS_OBFUSCATION_TOOLKIT. *Newman's* method uses views and triggers to do database encryption, which is just another way to develop encryption applications *outside* the database kernel. It has all the drawbacks of the loose coupling approach. From this alone, it is clear that *Newman's* approach is not an internal database feature. Therefore, *Newman* does not teach or suggest "providing a database engine having encryption as a database kernel feature", "internally encrypting said working encryption key within said database engine using a public key from an authorized user" and "internally encrypting said data within said database engine using said working key", as in claims 1 and 8.

Therefore, for at least the above-stated reasons, *Newman* does not anticipate claims 1 and 8. Applicants submit that inasmuch as claims 2-7 and 15 are dependent on claim 1 and claims 9-14 and 16 are dependent on claim 8, and claims 1 and 8 are patentable over *Newman*, claims 2-7 and 9-16 are patentable as dependent on patentable independent claims. Withdrawal of the instant rejections is respectfully requested.

With respect to claim 17, Applicants respectfully submit that *Newman* does not anticipate this claim for at least the reason that *Newman* does not teach or suggest

"decrypting the data to form plaintext data pages; using said plaintext data pages,
building an index and forming index pages; and encrypting said index pages", as in
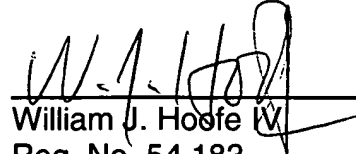claim 17. Withdrawal of the instant rejection is respectfully requested.

Withdrawal of the rejections under 35 U.S.C. § 102(e) is respectfully requested.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Issuance of a Notice of Allowance is respectfully requested.

Respectfully submitted,

Dated: September 8, 2006

William J. Hoofe IV
Reg. No. 54,183
Attorney for Applicants

F. CHAU & ASSOCIATES, LLC
130 Woodbury Road
Woodbury, New York 11797
Tel: (516)-692-8888
Fax: (516)-692-8889